

Amendment
U.S. Appl. No.: **10/562,417**
Attorney Docket No. **PSA0307692**

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all previous sets of claims in the application.

Listing of Claims:

1. (Currently amended): A method for controlling the operation of a cylinder of an internal-combustion engine, the cylinder being provided with a combustion chamber which can be opened or closed at the intake and opened or closed at the exhaust, and at least one fuel injector, in which method, during the same operating cycle of the cylinder, the following phases are carried out:

- an opening phase at the exhaust between an exhaust opening time (OE) and an exhaust closing time (FE);
- a first opening phase at the intake between a first intake opening time (OA1) after the exhaust opening time (OE) and a first intake closing time (FA1);
- a second opening phase at the intake between a second intake opening time (OA2) and a second intake closing time (FA2);
- a fuel injection phase between an injection start time (OI) and an injection end time (FI);
and
 - a combustion phase for the air/fuel mixture contained in the chamber (11),
wherein the exhaust closing time (FE) is between the first intake opening time (OA1) and the second intake opening time (OA2),

wherein the injection start time (OI) is between the first intake opening time (OA1) and the exhaust closing time (FE), and

Amendment

U.S. Appl. No.: 10/562,417

Attorney Docket No. PSA0307692

wherein the first intake closing time (FA1) precedes the second intake opening time (OA2).

2. (Previously presented): The method according to claim 1, wherein the first intake closing time (FA1) is after the exhaust closing time (FE).

3-4. (Canceled)

5. (Previously presented): The method according to claim 1, wherein the first intake closing time (FA1) precedes the injection start time (OI).

6. (Previously presented): The method according to claim 1, wherein the injection start time (OI) precedes the first intake closing time (FA1).

7. (Canceled)

8. (Previously presented): The method according to claim 1, wherein the exhaust closing time (FE) precedes the injection start time (OI).

9. (Previously presented): The method according to claim 1, wherein the amplitude of the opening at the intake is adjusted so that the amplitude of the opening during the first opening phase

Amendment

U.S. Appl. No.: 10/562,417

Attorney Docket No. PSA0307692

at the intake is different from the amplitude of the opening during the second opening phase at the intake.

10. (Previously presented): The method according to claim 1, wherein the phases are carried out during each operating cycle of the cylinder.

11. (Previously presented): An internal-combustion engine having at least one cylinder which is provided with a combustion chamber which can be opened or closed at the intake and opened or closed at the exhaust, and at least one fuel injector, wherein the cylinder operates in accordance with a method according to claim 1.

12. (Previously presented): A motor vehicle comprising an internal-combustion engine according to claim 11.

13. (Canceled)

14. (Previously presented): The method according to claim 2, wherein the second intake opening time (OA2) precedes the first intake closing time (FA1).

15. (Previously presented): The method according to claim 2, wherein the first intake closing time (FA1) precedes the injection start time (OI).

Amendment

U.S. Appl. No.: **10/562,417**

Attorney Docket No. **PSA0307692**

16. (Previously presented): The method according to claim 2, wherein the injection start time (OI) precedes the first intake closing time (FA1).

17. (Canceled)

18. (Previously presented): The method according to claim 2, wherein the exhaust closing time (FE) precedes the injection start time (OI).

19. (Previously presented): The method according to claim 2, wherein the amplitude of the opening at the intake is adjusted so that the amplitude of the opening during the first opening phase at the intake is different from the amplitude of the opening during the second opening phase at the intake.

20. (Previously presented): The method according to claim 2, wherein the phases are carried out during each operating cycle of the cylinder.

21. (Currently amended): A method for controlling the operation of a cylinder of an internal-combustion engine, the cylinder being provided with a combustion chamber which can be opened or closed at the intake and opened or closed at the exhaust, and at least one fuel injector, in which method, during the same operating cycle of the cylinder, the following phases are carried

Amendment

U.S. Appl. No.: **10/562,417**

Attorney Docket No. **PSA0307692**

out:

- an opening phase at the exhaust between an exhaust opening time (OE) and an exhaust closing time (FE);

- a first opening phase at the intake between a first intake opening time (OA1) after the exhaust opening time (OE) and a first intake closing time (FA1);

- a second opening phase at the intake between a second intake opening time (OA2) and a second intake closing time (FA2);

- a fuel injection phase between an injection start time (OI) and an injection end time (FI);

and

- a combustion phase for the air/fuel mixture contained in the chamber (11),

wherein the exhaust closing time (FE) is between the first intake opening time (OA1) and the second intake opening time (OA2),

wherein the injection start time (OI) is between the first intake opening time (OA1) and the exhaust closing time (FE), and

wherein the first intake closing time (FA1) precedes the injection start time (OI).

22. (Canceled)